

PATENT CLAIMS

1-9 (cancelled)

10. (new) A flat antenna (A) for receiving digital or analogue broadcasts from a satellite (S),

comprising at least one layer of individual receiver elements, the elements in the layer being interconnected by means of conductive paths in such a manner that the signal's phase shift due to the position of the elements in the layer is compensated for by means of length variations in the conductive paths, where the individual receiver elements are connected in pairs to a pair collector point, the pairs are connected into sub-arrays with a sub-array collector point, the sub-arrays are connected into arrays with an array collector point, and the arrays are connected into groups with a group collector point, characterized in that the conductive paths between elements (5,8), pairs (14), sub-arrays (15), arrays (17) and/or groups (19) comprise one or more of the following elements: straight segments extending in a first direction, straight segments extending in a second direction perpendicular to the first direction, straight segments extending on a third direction inclined or angled in relation to the first and the second directions and bent segments or compensation leads, wherein the bent segments comprise two or more polygonal sections and/or one or more curvilinear sections.

11. (new) Antenna according to claim 10,

characterized in that at least one sub-array (15) in an array (17) is connected to the array collector (18) by means of at least one straight segment extending in the third direction.

12 (new). Antenna according to any of the preceding claims,

characterized in that at least one array (17) in a group (19) is connected to a group collector (20) by means of a bent segment.

13. (new) Antenna according to claim 10,

characterized in that it comprises layers of elements (8) for receiving horizontally polarised signals and layers of elements (5) for receiving vertically polarised signals.

14. (new) Antenna according to claim 10,

characterized in that it comprises reflector elements (R) situated in an angle to the antenna plane, where this angle is preferably 90 degrees.

15. (new) Antenna according to claim 14,
characterized in that it is equipped with individual reflectors (R) for the individual
antenna elements (5,8) or with a strip of reflectors (R) assigned to several elements.

16. (new) Antenna according to claim 14 or 15,
characterized in that the reflector elements or individual reflectors (R) comprise
perforations (P) where these perforations to facilitate transmission of the incoming waves
from the satellite (S) reaching the elements (5, 8) without being blocked by the reflectors or
reflector elements (R).

17. (new) Antenna according to claim 10,
characterized in that each conductive element layer (4,7) comprises a collector
element (C) for signals from all the antenna groups (19), and the collector element (C)
consists of a conductive path with an air gap (G), where path length is different on both
sides of the gap (G), and a receiving head for receiving signals from the gaps.

18. (new) Antenna according to claim 10,
characterized in that it comprises a sheet (1) with holes (2), the width of the holes
(2) being between 12mm and 15mm for the frequency band of operation.

19. An antenna according to claim 10,
characterized in that it is in the form of a strip.